

IN THE SPECIFICATION:

Please amend the title of the application as follows:

Use of ~~Neurotoxin~~ Botulinum Toxin Therapy for ~~Urologic~~ Urinary Incontinence and Related Disorders

On page 1, immediately following the title of the application, please add the following new paragraph:

This application is a continuation of U.S. Patent Application Serial No. 09/978,982, filed October 15, 2001, now U.S. Patent No. 6,667,041, which is a continuation of U.S. Patent Application Serial No. 09/463,040, filed January 17, 2000, now U.S. Patent No. 6,365,164, which is a 371 of PCT Application No. PCT/US98/14625, filed July 15, 1998, which claims priority under 35 U.S.C. § 119(e) to U.S. Provisional Application Serial No. 60/052,580, filed July 15, 1997. The entire disclosure of each of the above-identified applications is incorporated herein by reference.

Please replace the paragraph beginning at page 5, line 20, with the following amended paragraph:

In accordance with one aspect of the present invention, there are provided methods of treating urological-neurological conditions in mammals, said methods comprising the step of administering a therapeutically effective amount of at least one neurotoxin to such a mammal. It is preferred that the neurotoxin inhibits synaptic function. Such inhibition produces selective denervation, and, for example, atrophy of the prostate and reversal of irritative symptoms associated with prostatic enlargement. In one embodiment of the instant invention, the neurotoxin induces dysfunction of the presynaptic neuronal terminal by specific binding and blockade of acetylcholine release at myoneural junctions. Such a neurotoxin can be, for example, botulinum toxin type A (~~Botox, Allergan~~) (*e.g.*, BOTOX®, Allergan).

Please replace the paragraph beginning at page 7, line 7, with the following amended paragraph:

Without being bound by theory, the basis for the treatment of the neurological-uological conditions according to the instant invention is the removal or modulation of the neural basis for the dysfunctional regulation of the affected tissue. For example, the modulation of the neural basis of prostate glandular dysfunction can be accomplished by any non-surgical means known in the art. Such means can include, for example, biofeedback, α -blockers, pharmacological methods, and the use of one or more neurotoxins to inhibit synaptic function in the affected gland. It is preferred that the neurotoxin cause long-lasting inhibition of synaptic function, preferably greater than one week, more preferably greater than one month, most preferably six to eight months or longer. Such neurotoxins can include, for example, capsaicin, resiniferatoxin, α -bungotoxin, terodotoxin and botulinum toxin. Botulinum toxin is a preferred neurotoxin according to the instant invention, particularly botulinum toxin A, more particularly ~~Botox (Allergan)~~ BOTOX® (Allergan).

Please replace the paragraph beginning at page 11, line 5, with the following amended paragraph:

Rats were randomly assigned into three groups. The first group received a single acute dose of Botulinum toxin type A (~~Botox, Allergan~~) (BOTOX®, Allergan) of 5, 10 or 15 IU. These animals were sacrificed one week after injection. The second group received a series of 4 weekly injections of 5 IU of Botulinum toxin and were sacrificed at 5 weeks. Control rats received saline injections. Injections were performed as a single or serial injections into the left and/or right ventral lobe of the prostate. note that an injection of methylene blue into one lobe of the rat prostate showed immediate diffusion into the opposite lobe. Thus, there was communication between the prostate lobes and therefore the contralateral lobe could not be used as a true comparative control.

Please replace the paragraph beginning at page 12, line 21, with the following amended paragraph:

Rats are injected in the prostate ventral lobes with single and serial doses of botulinum toxin (~~Botox~~ (BOTOX, Allergan)). The prostates are harvested at different time intervals to determine the smallest effective dose, as well as the morphological and physiological changes taking place with time. The smallest effective dose is defined as that dose that would demonstrate a decrease in prostate volume.